FILE 'MEDLINE, BIOSIS, SCISEARCH, LIFESCI, CANCERLIT, BIOTECHDS, CAPLUS' ENTERED AT 17:09:56 ON 08 DEC 2003 1096 S HELODERMIN# OR HELOSPECTIN OR TGLP1 OR (TGLP(W)1) Lì 26236 S (GASTR? OR BOWEL OR INTESTIN?) (W) EMPTY? L226389 S (GASTR? OR BOWEL OR INTESTIN?) (A) EMPTY? L3 34620 S (GASTR? OR BOWEL OR INTESTIN?) (A) MOTILITY L40 S L1(S)L3 L5 2 S L1(S)L4 L6 FILE 'PCTFULL, USPATFULL, EUROPATFULL' ENTERED AT 17:14:18 ON 08 DEC 2003 100 S HELODERMIN# OR HELOSPECTIN OR TGLP1 OR (TGLP(W)1) L7 4903 S (GASTR? OR BOWEL OR INTESTIN?) (A) (EMPTY? OR MOTILITY) L815 S L7 AND L8 L9 23 S EXENDIN1 OR EXENDIN2 OR (EXENDIN(W)(1 OR 2)) L1023 DUP REM L10 (0 DUPLICATES REMOVED) L11 0 S (1994 AND 7 AND 153)/SO L12 FILE 'MEDLINE, BIOSIS' ENTERED AT 18:13:52 ON 08 DEC 2003 444 S (1994 AND 7 AND 153)/SO L13 2 S L13 AND KUBIAK?/AU L14 FILE 'MEDLINE' ENTERED AT 18:15:24 ON 08 DEC 2003 1 S (1984 AND 166 AND 273)/SO L15 2 S (1984 AND 166 AND 277)/SO L16 1 S (1984 AND 166 AND 283)/SO L17 FILE 'MEDLINE, BIOSIS, SCISEARCH, CANCERLIT, LIFESCI, BIOTECHDS, CAPLUS' ENTERED AT 18:24:36 ON 08 DEC 2003 260671 S SECRETIN# OR VIP OR PHI L18 L19 3385 S (PANCREATIC (W) SECRETORY (W) FACTOR) OR PSF 264030 S L18 OR L19 L20 L21 180 S L20(S)L2 180 S L20(S)L3 L22252 S L20(S)L4 L23 415 S L22 OR L23 L24 L25 279 S L24 AND PY<1997 171 DUP REM L25 (108 DUPLICATES REMOVED) => s 124(s) (reduc? or slow? or delay? or abrogat? or eliminat? or decreas? or antagoni? or inhibit?) 3 FILES SEARCHED... 189 L24(S)(REDUC? OR SLOW? OR DELAY? OR ABROGAT? OR ELIMINAT? OR DECREAS? OR ANTAGONI? OR INHIBIT?) => s 127 and py<1997 2 FILES SEARCHED... 116 L27 AND PY<1997 => dup rem 128 PROCESSING COMPLETED FOR L28

79 DUP REM L28 (37 DUPLICATES REMOVED)

(FILE 'HOME' ENTERED AT 17:09:31 ON 08 DEC 2003)

part

L3 ANSWER 1 OF 1 MEDLINE on STN ACCESSION NUMBER: 93332151 MEDLINE

DOCUMENT NUMBER: 93332151 PubMed ID: 8393295

TITLE: Actions of Helodermatidae venom peptides and mammalian

glucagon-like peptides on gastric chief cells.

AUTHOR: Rai A; Singh G; Raffaniello R; Eng J;

Raufman J P

CORPORATE SOURCE: Department of Medicine, State University of New York-Health

Science Center, Brooklyn 11203-2098.

CONTRACT NUMBER: DK-34189 (NIDDK)

SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1993 Jul) 265 (1 Pt 1)

G118-25.

Journal code: 0370511. ISSN: 0002-9513.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199308

ENTRY DATE: Entered STN: 19930903

Last Updated on STN: 19990129 Entered Medline: 19930826

The actions of peptides (helospectin I, helodermin, exendin-3, exendin-4) AB that have been isolated from the venoms of Helodermatidae lizards were examined using dispersed chief cells from guinea pig stomach. These actions were compared with those of mammalian glucagon-like peptides, particularly truncated glucagon-like peptide 1 (TGLP-1), a peptide that shares 53% homology with exendin-4. The Helodermatidae venom peptides and TGLP-1 caused a two- to threefold increase in chief cell adenosine 3',5'-cyclic monophosphate and pepsinogen secretion. Exendin-3 and exendin-4 were 100 times more potent than helospectin I and helodermin and 10 times more potent than TGLP-1. Helospectin I and helodermin, but not exendin-4 or TGLP-1, inhibited the binding of 125I-labeled vasoactive intestinal peptide (VIP) and 125I-secretin to dispersed chief cells. actions of exendin-3, exendin-4, and TGLP-1, but not those of helospectin I, helodermin, VIP, or secretin, were progressively inhibited by increasing concentrations of an exendin-receptor antagonist, exendin-(9-39)-NH2. These data indicate that in gastric chief cells, whereas the actions of helospectin I and helodermin are mediated by interaction with high-affinity secretin (low-affinity VIP) receptors, the actions of exendin-3, exendin-4, and TGLP-1 are mediated by interaction with exendin receptors.

ANSWER 2 OF 2 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN

DGENE ACCESSION NUMBER: AAR80545 peptide

Stimulating/inhibiting insulin release with exendin TITLE:

polypeptide(s) - for treating diabetes mellitus and

preventing hyperglycaemia.

Eng J INVENTOR:

PATENT ASSIGNEE: (ENGJ-I) ENG J.

17p PATENT INFO: US 5424286 A 19950613

APPLICATION INFO: US 1993-66480 19930524 PRIORITY INFO: US 1993-66480 19930524

DOCUMENT TYPE: Patent English LANGUAGE:

OTHER SOURCE: 1995-262627 [34]

Heloderma horridum exendin-3.

DESCRIPTION: AAR80545 peptide DGENE AN

2 A; 1 R; 1 N; 2 D; 0 B; 0 C; 1 Q; 4 E; 0 Z; 4 G; 1 H; 1 I; 3 AΑ

L; 2 K; 1 M; 2 F; 4 P; 6 S; 2 T; 1 W; 0 Y; 1 V; 0 Others

SQL

SEQ

1 hsdgtftsdl skqmeeeavr lfiewlkngg pssgappps

HITS AT: 1-39

L11 ANSWER 1 OF 2 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: AAR80546 peptide DGENE

TITLE: Stimulating/inhibiting insulin release with exendin

polypeptide(s) - for treating diabetes mellitus and

preventing hyperglycaemia.

INVENTOR: Eng J

4 . 1

PATENT ASSIGNEE: (ENGJ-I) ENG J.

PATENT INFO: US 5424286 A 19950613 17p

APPLICATION INFO: US 1993-66480 19930524 PRIORITY INFO: US 1993-66480 19930524

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 1995-262627 [34]

DESCRIPTION: Heloderma suspectum exendin-4.

AN AAR80546 peptide DGENE

AA 2 A; 1 R; 1 N; 1 D; 0 B; 0 C; 1 Q; 5 E; 0 Z; 5 G; 1 H; 1 I; 3

L; 2 K; 1 M; 2 F; 4 P; 5 S; 2 T; 1 W; 0 Y; 1 V; 0 Others

SQL 39

SEQ

1 hgegtftsdl skqmeeeavr lfiewlkngg pssgappps

HITS AT: 1-39

☐ 1: <u>HWGHS</u>. exendin-1 - Mexic...[gi:69269]

BLink, Links

LOCUS HWGHS 38 aa linear VRT 07-MAY-1999
DEFINITION exendin-1 - Mexican beaded lizard.

ACCESSION HWGHS

VERSION HWGHS GI:69269
DBSOURCE pir: locus HWGHS;

summary: #length 38 #molecular-weight 4096 #checksum 8167

; includes: helospectin II;

superfamily: glucagon

PIR dates: 04-Dec-1986 #sequence\_revision 04-Dec-1986 #text\_change 07-May-1999

KEYWORDS duplication; secretagogue; venom.

SOURCE Heloderma horridum (Mexican beaded lizard)

ORGANISM Heloderma horridum

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae; Heloderma.

REFERENCE 1 (residues 1 to 38)

AUTHORS Parker, D.S., Raufman, J.P., O'Donohue, T.L., Bledsoe, M., Yoshida, H. and Pisano, J.J.

TITLE Amino acid sequences of helospectins, new members of the glucagon superfamily, found in Gila monster venom

JOURNAL J. Biol. Chem. 259 (19), 11751-11755 (1984)

MEDLINE <u>85006896</u> PUBMED <u>6207171</u>

TITLE

REMARK Heloderma suspectum (Gila monster)

REFERENCE 2 (residues 1 to 38)

AUTHORS Vandermeers, A., Gourlet, P., Vandermeers-Piret, M.C., Cauvin, A., De Neef, P., Rathe, J., Svoboda, M., Robberecht, P. and Christophe, J.

Chemical, immunological and biological properties of peptides like

vasoactive-intestinal-peptide and peptide-histidine-isoleucinamide extracted from the venom of two lizards (Heloderma horridum and

Heloderma suspectum)

JOURNAL Eur. J. Biochem. 164 (2), 321-327 (1987)

reanalysis of peptide components in the venoms of Heloderma horridum and H. suspectum indicated that exendin-1 and its 37-residue variant are the major components of H. horridum venom, whereas exendin-2 is the major peptide from H. suspectum venom (very small amounts of exendin-1 may be present); it is suggested that the source of the venom used by Parker et al. (reference

number A01555) may have been misidentified

COMMENT Exendins are venom components that are thought to bind to receptors for vasoactive intestinal peptide and/or secretin on pancreatic

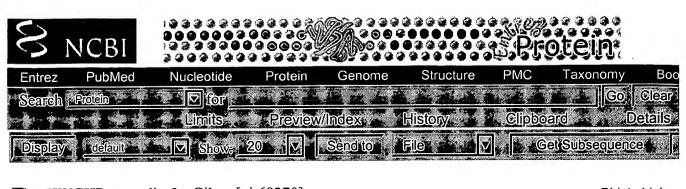
acinar cells and to activate adenylate cyclase, resulting in

```
secretion of amylase.
                     Location/Qualifiers
FEATURES
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                     1..38
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                     /note="helodermin H38; helospectin I"
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                     /note="exendin-1 (helospectin I)"
                     1..37
     Region
                     /region_name="product"
                     /note="helospectin II"
ORIGIN
        1 hsdatftaey skllaklalq kylesilgss tsprppss
//
```

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0 (1280) 1254-28

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☐ 1: <u>HWGHD</u>. exendin-2 - Gila ...[gi:69270]

BLink, Links

LOCUS HWGHD 35 aa linear VRT 07-MAY-1999

DEFINITION exendin-2 - Gila monster.

ACCESSION HWGHD

VERSION HWGHD GI:69270 DBSOURCE pir: locus HWGHD;

summary: #length 35 #molecular-weight 3844 #checksum 9049

;

superfamily: glucagon

;

PIR dates: 04-Dec-1986 #sequence\_revision 04-Dec-1986 #text\_change

07-May-1999

KEYWORDS amidated carboxyl end; duplication; secretagogue; venom.

SOURCE Heloderma suspectum (Gila monster)

ORGANISM Heloderma suspectum

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae; Heloderma.

1 /-----

REFERENCE 1 (residues 1 to 35)

AUTHORS Hoshino, M., Yanaihara, C., Hong, Y.M., Kishida, S., Katsumaru, Y.,

Vandermeers, A., Vandermeers-Piret, M.C., Robberecht, P.,

Christophe, J. and Yanaihara, N.

TITLE Primary structure of helodermin, a VIP-secretin-like peptide

isolated from Gila monster venom

JOURNAL FEBS Lett. 178 (2), 233-239 (1984)

MEDLINE <u>85076959</u> PUBMED <u>6439576</u>

REFERENCE 2 (residues 1 to 35)

AUTHORS Vandermeers, A., Gourlet, P., Vandermeers-Piret, M.C., Cauvin, A., De

Neef, P., Rathe, J., Svoboda, M., Robberecht, P. and Christophe, J.

TITLE Chemical, immunological and biological properties of peptides like

vasoactive-intestinal-peptide and peptide-histidine-isoleucinamide extracted from the venom of two lizards (Heloderma horridum and

Heloderma suspectum)

JOURNAL Eur. J. Biochem. 164 (2), 321-327 (1987)

MEDLINE <u>87190398</u> PUBMED <u>3569266</u>

REFERENCE 3 (residues 1 to 35)

AUTHORS Robberecht, P., Vandermeers, A., Vandermeers-Piret, M.C., Gourlet, P.,

Cauvin, A., De Neef, P. and Christophe, J.

TITLE Helodermin-like peptides

JOURNAL Ann. N. Y. Acad. Sci. 527, 186-203 (1988)

MEDLINE 88267739
PUBMED 3291692
REMARK annotation

the discrepancies at positions 8 and 9 reported by Hoshino et al. (reference number A01556) and Vandermeers et al. (reference number A37584) cannot yet be resolved but do not appear to be the result of errors in the sequence determinations; it is even possible that

two variants exist



```
Exendins are venom components that are thought to bind to receptors
COMMENT
            for vasoactive intestinal peptide and/or secretin on pancreatic
            acinar cells and to activate adenylate cyclase, resulting in
            secretion of amylase.
FEATURES
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     source
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                     1..35
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                     /note="helodermin; helodermin S35"
     Site
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                     /note="amidated carboxyl end (Pro)"
ORIGIN
        1 hsdaiftqqy skllaklalq kylasilgsr tsppp
//
```

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Die 1 2003 12:53-28

From: Sent:

Canella, Karen Monday, December 08, 2003 6:09 PM STIC-ILL ill order 08/908,867

185

, JSJPist

To:

Subject:

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

- Eur Journal of biochemistry, 1987, 164(2):321-327 1.
- 2. Ann NY Acad Sci, 1988, Vol. 527, pp. 186-203

FEBS Lett, 1984, 178(2):233-239

From: Sent:

Canella, Karen

Monday, December 08, 2003 3:47 PM

To:

STIC-ILL

Subject:

ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Acta Radiologica, 1988 Jan-Feb, 29(1):49-52

2. Ann NY Acad Sci, 1988, pp. 168-185

3. Digestion, 1978, Vol. 17, No. 5, pp. 459-460

BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

**DUPLICATE 13** 

ACCESSION NUMBER: 1994:102262 BIOSIS DOCUMENT NUMBER: PREV199497115262

TITLE:

Postprandial GLP-1 in patients after esophageal resection, total gastrectomy and massive small-

bowel resection.

AUTHOR(S):

Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.;

Schaper, S.

CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines

SOURCE:

Krankenhaus, Vienna, Austria Digestion, (1993) Vol. 54, No. 6, pp. 386-388.

Meeting Info.: International Symposium on Glucagon-Like Peptide-1. Copenhagen, Denmark. May 17-19, 1993.

CODEN: DIGEBW. ISSN: 0012-2823.

Conference; (Meeting) **DOCUMENT TYPE:** 

Abstract; (Abstracts Only)

LANGUAGE:

English

**ENTRY DATE:** 

Entered STN: 5 Mar 1994 Last Updated on STN: 5 Mar 1994

SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

ACCESSION NUMBER: 96:388172 SCISEARCH

THE GENUINE ARTICLE: UJ883

TITLE:

GASTROINTESTINAL EFFECTS OF GLUCAGON

-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF

ACTION

AUTHOR:

HOLST J J (Reprint); WOJDEMANN M; WETTERGREN A

SOURCE:

DIABETES, (MAY 1996) Vol. 45, Supp. 2, pp. 859.

ISSN: 0012-1797.

DOCUMENT TYPE:

Conference; Journal

FILE SEGMENT: LANGUAGE:

LIFE; CLIN ENGLISH

REFERENCE COUNT:

No References

12 2 1 1

.. 343 ·

PC660,A1D0

From: Sent: To: Subject:

Canella, Karen Monday, December 08, 2003 6:09 PM STIC-ILL ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

- Eur Journal of biochemistry, 1987, 164(2):321-327 1.
- 2. Ann NY Acad Sci, 1988, Vol. 527, pp. 186-203
- FEBS Lett, 1984, 178(2):233-239 3.

1

From:

Canella, Karen

Sent:

Monday, December 08, 2003 3:47 PM

To:

STIC-ILL

Subject:

ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

Acta Radiologica, 1988 Jan-Feb, 29(1):49-52

2. Ann NY Acad Sci, 1988, pp. 168-185

3. Digestion, 1978, Vol. 17, No. 5, pp. 459-460

BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN 200 1-16

**DUPLICATE 13** 

ACCESSION NUMBER: 1994:102262 BIOSIS PREV199497115262 DOCUMENT NUMBER:

TITLE:

Postprandial GLP-1 in patients after esophageal resection, total gastrectomy and massive small-

bowel resection.

AUTHOR(S):

Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.;

Schaper, S.
CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines

Krankenhaus, Vienna, Austria

SOURCE:

Digestion, (1993) Vol. 54, No. 6, pp. 386-388.

Meeting Info.: International Symposium on Glucagon-Like Peptide-1. Copenhagen, Denmark. May 17-19, 1993.

CODEN: DIGEBW. ISSN: 0012-2823. TTYPE: Conference; (Meeting) Abstract; (Abstracts Only) **DOCUMENT TYPE:** 

LANGUAGE: Énglish

Entered STN: 5 Mar 1994 **ENTRY DATE:** Last Updated on STN: 5 Mar 1994

5. SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN ACCESSION NUMBER: 96:388172 SCISEARCH

THE GENUINE ARTICLE: UJ883

TITLE:

GASTROINTESTINAL EFFECTS OF GLUCAGON

-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF

ACTION

**AUTHOR:** 

HOLST J J (Reprint); WOJDEMANN M; WETTERGREN A DIABETES, (MAY 1996) Vol. 45, Supp. 2, pp. 859.

SOURCE:

ISSN: 0012-1797.

DOCUMENT TYPE:

Conference; Journal

FILE SEGMENT:

LIFE; CLIN

LANGUAGE:

**ENGLISH** 

REFERENCE COUNT: No References

STIC-II

From: Sent:

Canella, Karen

Monday, December 08, 2003 3:47 PM

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To: Subject:

ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

Acta Radiologica, 1988 Jan-Feb, 29(1):49-52 1.

Ann NY Acad Sci, 1988, pp. 168-185 2.

Digestion, 1978, Vol. 17, No. 5, pp. 459-460 3.

BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

**DUPLICATE 13** 

ACCESSION NUMBER: 1994:102262 BIOSIS DOCUMENT NUMBER: PREV199497115262

Postprandial GLP-1 in patients after esophageal TITLE:

resection, total gastrectomy and massive small-

bowel resection.

Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.; AUTHOR(S):

Schaper, S.

CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines Krankenhaus, Vienna, Austria SOURCE: Digestion, (1993) Vol. 54, No. 6, pp. 386-388.

Meeting Info.: International Symposium on Glucagon-Like Peptide-1. Copenhagen, Denmark. May 17-19, 1993.

CODEN: DIGEBW. ISSN: 0012-2823.

Conference; (Meeting) **DOCUMENT TYPE:** 

Abstract; (Abstracts Only)

LANGUAGE: English

Entered STN: 5 Mar 1994 **ENTRY DATE:** Last Updated on STN: 5 Mar 1994

SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

ACCESSION NUMBER: 96:388172 SCISEARCH

THE GENUINE ARTICLE: UJ883

GASTROINTESTINAL EFFECTS OF GLUCAGON TITLE:

-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF

**ACTION** 

HOLST J J (Reprint); WOJDEMANN M; WETTERGREN A **AUTHOR:** 

DIABETES, (MAY 1996) Vol. 45, Supp. 2, pp. 859. ISSN: 0012-1797. SOURCE:

Conference; Journal **DOCUMENT TYPE:** 

LIFE; CLIN ENGLISH FILE SEGMENT: LANGUAGE:

No References REFERENCE COUNT: